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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,421	01/30/2001	Benjamin Sonnenreich	K&S-101US	9774

23122 7590 07/08/2003

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VALLEY FORGE, PA 19482-0980

EXAMINER

TRAN, LEN

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 07/08/2003

21

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicant(s)	
	SONNENREICH ET AL.	
	Application N .	Art Unit
	09/772,421	1725
	Examiner	
	Len Tran	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-10,12-16 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-10,12-16 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-5, 7-9, 12-16, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (figure 1a and 1b), and further in view of Haefling et al (US '854).

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Applicant's admitted prior art in figure 1a and 1b discloses a bonding tool for bonding a wire to a substrate having an orifice extending along a longitudinal axis of the body and the working tip and having a conical portion adjacent the working tip.

Applicant's admitted prior art fails to teach an orifice along a longitudinal body, a polymer, non conductive, coating disposed over at least a portion of a surface of the orifice, wherein the coating extends along an entire length of the orifice, or the exterior surface of the tip, or the body of the tip. The coating is substantially uniform in thickness and the body of the tool is substantially cylindrical.

However, Haeffling et al disclose an orifice along a longitudinal body, a polymer, non conductive, coating disposed over at least a portion of a surface of the orifice, wherein the coating extends along an entire length of the orifice, or the exterior surface of the tip, or the body of the tip. The coating is substantially uniform in thickness and the body of the tool is substantially cylindrical (col. 3, lines 15-30, lines 55-63). Haeffling et al disclose the above differences for the purpose of preventing arcing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide the above differences taught by Haeffling et al, in Applicant's admitted prior art in order to prevent arcing.

Haeffling et al disclose the claimed invention, but fail to teach the polymer being a polyolefin or a parylene. However, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have either polyolefine or parylene, since it has been held to be within the general skill of a worker in the art to select a known material on the

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basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (figure 1a and 1b), and further in view of Hadar et al (US 6,171,456).

Applicant's admitted prior art discloses the claimed invention above in paragraph 3, but fail to teach a coating disposed on the surface thereof, and that the coating is about 2 microns thick.

Hadar et al disclose a bonding tool having a body, working tip, and an orifice. The orifice has a coating disposed on the surface thereof, and that the coating is about 2 microns thick (col. 3, lines 58-65, and figure 4) for the purpose of preventing distortion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide about 2 microns thick coating as taught by Hadar et al, in Applicant's admitted prior art in order to prevent distortion.

Response to Arguments

5. Applicant's arguments with respect to claims 1-5, 7-10, 12-16, 28 have been considered but are moot in view of the new ground(s) of rejection.

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Inquiry


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Len Tran whose telephone number is (703)605-1175. The examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3602 for regular communications and (703)305-3602 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Len Tran
Examiner
Art Unit 1725

LT
July 2, 2003


M. ALEXANDRA ELVE
PRIMARY EXAMINER